IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Laurence B. Boucher, et al.

Ser. No:

10/678,336

Filing Date:

October 3, 2003

Examiner:

Unknown

Atty. Docket No:

ALA-008H

GAU:

Unknown

For:

METHOD AND APPARATUS FOR DYNAMIC PACKET BATCHING

WITH A HIGH PERFORMANCE NETWORK INTERFACE

January 6, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Supplemental Information Disclosure Statement per 37 C.F.R. §1.98

Sir:

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, the undersigned and Applicants bring the following information to the Examiner's attention in the above-identified application. The undersigned has not been able to verify the following information with a high degree of certainty. Applicants and the undersigned, therefore, do not and cannot admit or represent that the information set forth below is either true or accurate or complete. Parts of the following information may indeed be wrong. The undersigned sets forth the information in the following numbered paragraphs upon information and belief. If the Examiner would like to discuss anything set forth in this Information Disclosure Statement, the Examiner is requested to contact the undersigned. The undersigned would gladly discuss these matters with the Examiner in further detail.

1. Prior to 1995, a company called Excelan, Inc. made and sold network interface cards (NIC cards) in the United States. One such Excelan NIC card was an expansion card for an IBM PC host computer. The host computer ran a Microsoft operating system. The expansion card coupled the personal computer to an Ethernet local area network (LAN) running TCP/IP. Along with the expansion cards, Excelan provided certain software that executed on the host computer to support the expansion card. In

addition to making and selling such NIC cards for IBM personal computers, Excelan also made and sold NIC cards for interfacing numerous other hardware platforms to LANs. For additional detail, see the following documents that are submitted to the Examiner along with this Information Disclosure Statement:

- 1) The first ten pages of Form 10-K for Excelan, Inc. for the fiscal year ending December 31, 1987.
- 2) The first ten pages of Form 10-K for Excelan, Inc. for the fiscal year ending December 31, 1988.
- 2. In an attempt to determine more detail on how the Excelan NIC cards and associated software worked, the undersigned contacted several individuals previously employed by Excelan including Kanwal Rekhi (Excelan's former CEO), Mukesh Sundaram (Excelan's former Chief Technology Officer), and Bruce Steinback. These individuals are not employed or affiliated with Alacritech, Inc. (the assignee of the present application). These individuals were somewhat hesitant to talk at length about Excelan with the undersigned. Consequently, the information received from these individuals was limited.
- 3. Upon information and belief, Excelan NIC cards provided an interface for TCP/IP communication between an Ethernet network and a host computer. The undersigned at this time does not know whether software executing on the host computers that worked with the Excelan NIC cards included a stack of protocol processing layers.
- 4. It is the undersigned's present understanding that the Excelan NIC cards and associated software did not provide both: 1) a "fast-path" whereby the card performed TCP and IP protocol processing for some network traffic, and 2) a "slow-path" whereby the card forwarded the other network traffic to a protocol processing stack on the host computer such that the host computer performed TCP and IP protocol processing on that other network traffic.

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- 5. Upon information and belief, control of a TCP connection was not passed from the host computer to the Excelan NIC card, nor was control of a TCP connection passed from the Excelan NIC card to the host computer.
- 6. Neither the undersigned nor Applicants at this time know whether the Excelan NIC cards had a hardware queue manager.
- 7. Neither the undersigned nor Applicants at this time know whether the Excelan NIC cards involved dedicated hardware circuitry that performed TCP and/or IP protocol processing, or whether a general purpose processor on the Excelan NIC cards performed all TCP and IP protocol processing.
- 8. Neither the undersigned nor Applicants at this time know exactly how the Excelan NIC cards and the associated host computer moved data from incoming TCP/IP packets from the NIC card to a location where an application running on the host computer could use the data. For example, neither the undersigned nor Applicants know whether such data was moved directly from the card to a target buffer on the host computer identified by an application program, or whether such data was moved from the card to a first location on the host computer and then the host subsequently moved the data from that first location to a target buffer on the host computer identified by an application program. Data could also have been moved from the card to a target buffer in another indirect fashion.
- 9. The undersigned, in an attempt to determine more about how the Excelan NIC cards operated, found several Excelan NIC cards for sale on the Internet. The undersigned purchased the Excelan NIC cards. Due to the considerable time and cost involved, neither the undersigned nor Applicants nor anyone else at Alacritech has to date attached the Excelan NIC cards to an appropriate working host computer and begun the time-consuming task of attempting to determine more details on how the host computer and Excelan NIC cards actually work together.

10. Upon information and belief, Excelan was acquired by Novell, Inc. and as such is no longer in business.

If the Examiner would like to discuss any aspect of this application, including any information set forth in this Information Disclosure Statement, the Examiner is requested to contact the undersigned at the number below.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 6, 2004.

Date: /-6-04

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Respectfully submitted,

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SUPPLEMENTAL INFORMATION DISCLOSURE						Inventors: Laurence B. Boucher, et al.				
JAN 0 9 2004 STATEMENT BY APPLICANT						Group Art Unit: Unknown				
METHOD AND APPARATUS FOR DYNAMIC PACKET BATCHING TRADENTH A HIGH PERFORMANCE NETWORK INTERFACE						Examiner name: Unknown				
						Attorney Docket No. ALA-008H				
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